

REMARKS

The Advisory Action has been carefully reviewed. Claims 1-30 are pending.

Claims 1-30 have been rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 4036771 to Denis *et al.* ("Denis") in view of U.S. Patent No. 3071546 to Tuyle ("Tuyle"). *See* Advisory Action at ¶ 11. Applicants respond as follows.

I. Withdrawal of Objections and Rejections from Final Rejection dated March 15, 2011.

Applicants thank the Examiner for withdrawing the objections to the status identifiers and 37 C.F.R. § 1.75(c), the rejections under 35 U.S.C. § 132 and 35 U.S.C. §§ 112 first paragraph and for withdrawing the rejections under 35 U.S.C. § 102(a) over Denis and under 35 U.S.C. § 103(a) over U.S. Patent No. 6010984 to Heimann *et. al.* ("Heimann") in view of Denis and further in view of Tuyle. *See* Advisory Action at ¶ 11.

II. Rejection under 35 U.S.C. § 103(a).

Claims 1-30 have been rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over Denis in view of Tuyle. *See* Advisory Action at ¶ 11. The Examiner states:

Applicants argue that Denis does not disclose the esters comprising trimer acids derived from tall oil fatty acids. The examiner is in agreement with this contention and it is why Denis is no longer a valid 102 reference but instead being used as a 103 reference wherein the secondary reference is introduced for its disclosure of equivalence regarding trimer acids derived from natural oils - which are disclosed with specificity in Denis.

Applicants also argue that the combination of Denis and Tuyle do not make the instant claims obvious. This argument is also not persuasive. Tuyle is introduced to show that there is equivalence in trimer acids derived from natural oils including soya bean and tall oil fatty acids. Applicants indicate that the by-products or co-products of soya bean and tall oil fatty acids are equivalent, but applicants contend that the polymerization product derived from the natural oils are not equivalent. It is the position of the examiner that since the coproducts are the same for both types of natural oils - that the finite number of products obtainable from the co-products would at least be obvious with a reasonable expectation of success based on the disclosure of Tuyle. Applicants have not satisfied the burden of showing how the products would be different as independent claims 1 and 16 are both product-by-process claims.

See Advisory Action at ¶ 11. This rejection, however, does not address the limitation of independent claims 1, 16, 25, 27 and 29 that the claimed composition must be compatible with

polypropylene, or Applicants' evidence that complex esters made from natural oils such as soya bean do not provide acceptable polypropylene compatibility.

The U.S. Patent & Trademark Office issued Guidelines in 2007 and a later update regarding the reasoning required to support an obviousness determination. *See Examination Guidelines Update: Developments in the Obviousness Inquiry after KSR v. Teleflex*, 1358 OG 372-404. The 2007 KSR Guidelines noted that the teaching-suggestion- motivation (TSM) test was but one possible approach in making such a determination, and they identified the following six other rationales that could also be used:

- (1) combining prior art elements according to known methods to yield predictable results;
- (2) simple substitution of one known element for another to obtain predictable results;
- (3) use of a known technique to improve similar devices, methods, or products in the same way;
- (4) applying a known technique to a known device, method, or product ready for improvement to yield predictable results;
- (5) obvious to try - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; and
- (6) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art.

Denis discloses lubricating compositions consisting of homogeneous mixtures of at least one mineral or synthetic hydrocarbon oil of lubricating viscosity; at least one complex ester composition; and optionally at least one light ester. *See Abstract*; Col. 1, lines 24-33. The complex esters of Denis result from the reaction of dimeric and trimeric acids which are the product of the dimerization and trimerization of the following unsaturated fatty acids, none of which are tall oil fatty acids:

- tetradecenoic acids (such as myristeleic acid);
- hexadecenoic acids (such as palmitoleic acid);
- octadecenoic acids (such as oleic acid);
- octadecadienoic acids (such as linoleic acid);
- octadecatrienoic acids (such as linolenic acid);

- eicosenoic acids;
- docosenoic acids (such as erucic acid or brassidic acid);
- natural or synthetic mixtures of a plurality of such acids, for example:
 - fatty soya bean acids which contain inter alia about 25% of octadecenoic acid, 45% of octadecadienoic acid and 7% of octadecatrienoic acid;
 - fatty linseed oil acids which contain inter alia about 20% of octadecenoic acid, 15% of octadecadienoic acid and 50% of octadecatrienoic acid;
 - fatty spermaceti oil acids which contain inter alia about 5% of tetradecenoic acid, 15% of hexadecenoic acid, 35% of octadecenoic acid and 1% of octadecadienoic acid;
 - fatty colza oil acids which contain inter alia about 18% of octadecenoic acid, 19% of octadecadienoic acid, 8% of octadecatrienoic acid, 6% of eicosenoic acid and 42% of docosenoic acid; and
- di- and tricarboxylic acids resulting from the dimerization or trimerization of hydroxycarboxylic acids such as ricinoleic acid.

See col. 3, lines 21-51. The ester compositions of claims 1-30 must be compatible with polypropylene, as set forth by the limitation in independent claims 1, 16, 25, 27 and 29 that “the weight of a polypropylene sample increases less than about 5 wt.% through absorption of the [claimed] composition following exposure of the polypropylene and the composition at a temperature of about 80°C after a period of four weeks.” The ester compositions of claims 1-30 are derived from tall oil fatty acids and thus provide desirable polypropylene compatibility characteristics. *See* Lloyd Declaration, submitted with Response to Office Action dated March 18, 2010, ¶ 10. Applicants presented evidence that the complex ester compositions of Denis, which are made from non-tall oil fatty acids, do not display the polypropylene compatibility characteristics of the inventions claimed in claims 1-30. *See id.* at ¶ 11.

There is nothing in Tuyle that teaches or suggests that the polymerization products of soy bean oil and tall oil would render complex ester compositions having similar or equivalent polypropylene compatibility to the compositions of claims 1, 16, 25, 27 and 29. There would be no reasonable expectation of success to substitute natural oils including soya bean for the tall oil in the claimed compositions based on the disclosure of Denis and Tuyle because complex esters

made from natural oils do not have acceptable polypropylene compatibility. *See* Lloyd Declaration at ¶ 11.

Accordingly, Applicants respectfully submit that Denis in view of Tuyle does not render claims 1, 16, 25, 27 and 29, or claims 2-15, 17-24, 26, 28 and 30, obvious and request that these rejections be withdrawn.

Conclusion

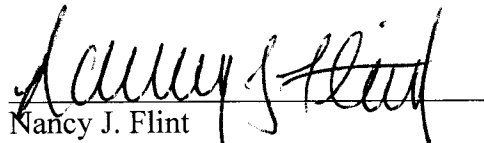
Applicants respectfully submit that claims 1-30 are in condition for allowance and request allowance of the same.

This Submission has been filed within two (3) months of the mailing date of the Advisory Action and a request for a 3 month extension of time along with the fee of \$1110.00 plus \$810.00 for a Request for Continued Examination is submitted. If any other fees are determined to be due, the Commissioner is hereby authorized to charge such fees to Deposit Account No. 50-4222.

Respectfully submitted,

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By:


Nancy J. Flint
Registration No. 46,704

Attorney for Arizona Chemical Company,
LLC
Intellectual Property Department (Legal)
P.O. Box 550850
Jacksonville, Florida 32255